Paper	
-------	--

UNITED	STATES	PATENT	AND	TRAD	EMARK	OFFIC	ĽΕ

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIQUIDIA TECHNOLOGIES, INC., Petitioner,

v.

UNITED THERAPEUTICS CORPORATION, Patent Owner.

Case IPR2020-00770 Patent 9,604,901

PATENT OWNER'S RESPONSE TO PETITION



TABLE OF CONTENTS

I.	INT	TRODUCTION				
II.		THE '901 PATENT IS THE PROPER FOCUS OF THIS PROCEEDING				
	A.	The '901 Patent Claimed Subject Matter	2			
	В.	The '393 Patent and the '901 Patent Claim Different Inventions				
	C.	Liquidia Ignores the Context and Purpose of the '901 Patent Claims	5			
III.	CLA	CLAIM CONSTRUCTION				
	A.	Pharmaceutical Batch	9			
	В.	Pharmaceutical Product	10			
	C.	"[C]ontacting the solution comprising treprostinil from step (b) with a base to form a salt of treprostinil"	11			
	D.	Storing, Storage	11			
	E.	A Salt Treprostinil	12			
	F.	Liquidia's Implicit Constructions Are Not the Plain and Ordinary Meaning	12			
	G.	Liquidia Ignores the '901 Patent's Different Claim Types	14			
	Н.	Liquidia Improperly Construes the Instituted Claims as "Substantively Similar" to the Claims in the '393 IPR	14			
IV.	THE	THE GROUNDS RELY ON IMPROPER EVIDENCE				
	A.	The Winkler Declaration is Not Evidence Under 37 C.F.R. § 42.63	17			
	В.	Prof. Winkler Failed to Support His Opinion	18			
	C.	Prof. Winkler Does Not Understand Inherency in Obviousness				



V.	APPI	ROPRIATE TRAINING OR SKILL MUST HAVE NUFACTURING2			
VI.	GROUND 1: PHARES FAILS TO RENDER CLAIMS 1-9 OBVIOUS				
	A.	Phares Alone Does Not Render Claim 1 Obvious			
		1.	Liquidia fails to explain why a POSA would modify Phares	29	
		2.	Claim 1 requires a pharmaceutical batch consisting of treprostinil and impurities	35	
		3.	Phares Does Not Teach Treprostinil Synthesis	38	
		4.	Phares does not teach a pharmaceutical batch of at least 2.9 grams	43	
		5.	Phares does not cite to U.S. Patent No. 4,306,075 for selectively alkylating a benzindene triol	45	
		6.	Eğe, Schoffstall, Wiberg, and Kawakami are irrelevant to claim 1, and do not cure any of Phares's deficiencies	46	
	B.	Phare	es Alone Does Not Render Claim 2 Obvious	49	
	C.	Phare	es Alone Does Not Render Claims 3-5 Obvious	49	
	D.	Phare	es Alone Does Not Render Claims 6 and 7 Obvious	50	
	E.	Phare	es Alone Does Not Render Claims 8 and 9 Obvious	51	
VII.			2: MORIARTY AND PHARES FAIL TO RENDER -9 OBVIOUS	51	
	A.	UT is	s Not Precluded from Addressing Motivation to Combine	52	
	B.	Phare	es and Moriarty are Directed to Different Problems	54	
	C. Moriarty with Phares Does Not Render Claim 1 Obvious.			56	
		1.	Moriarty and Phares do not teach the same process steps, and there is no motivation to combine these references in the way recited in claim 1	57	



Patent Owner Response

	2. A product from Moriarty and Phares does not inherently include the same resulting impurities	
	D. Moriarty with Phares Does Not Render Claims 6 and 7 Obvious	ıs65
VIII.	EVIDENCE OF SECONDARY CONSIDERATIONS FURTHER ESTABLISHES UNOBVIOUSNESS, WHICH LIQUIDIA	6.6
IX	THIS PROCEEDING IS NOT CONSTITUTIONAL	
	CONCLUSION	



TABLE OF AUTHORITIES

Cases

Arthrex, Inc. v. Smith & Nephew, Inc., 941 F.3d 1320 (Fed. Cir. 2019)68
B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293 (2015)51
Bicon, Inc. v. Straumann Co., 441 F.3d 945 (Fed. Cir. 2006)11
Crown Operations Intern., Ltd. v. Solutia Inc., 289 F.3d 1367 (Fed. Cir. 2002)28
Crown Ops. Int'l v. Solutia, 289 F.3d 1368 (Fed. Cir. 2002)62
Environmental Designs, Ltd. v. Union Oil Co., 713 F.2d 693 (Fed. Cir. 1983)23
Graham v. John Deere Co., 383 U.S. 1 (1966)48
In re Craig, 411 F.2d 1333 (CCPA 1969)4
In re Cyclobenzaprine Hydrochloride, 676 F.3d 1063 (Fed. Cir. 2012)65
In re Newell, 891 F.2d 899 (Fed. Cir. 1989)62
In re Omeprazole Patent Litigation, 536 F.3d 1361 (Fed. Cir. 2008)59
<i>In re Soni</i> , 54 F.3d 7460 (Fed. Cir. 1995)
King v. Alston, 75 F.3d 657 (Fed. Cir. 1996)69
KSR Int'l v. Teleflex Inc., 550 U.S. 398 (2007)55
Murphy v. NCAA, 138 S. Ct. 1461 (2018)70
Papst Licensing GMBH & Co. v. Samsung Elecs. Am., Inc., 924 F.3d 1243 (Fed.
Cir 2019)



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

